VII. MEASUREMENT OF PROGRESS TOWARD WASTE REDUCTION GOALS

A. THE DISTRICT WILL COMPLY WITH GOAL #1

The District will continue to comply with Goal #1: Program Standards for Districts – Ensure the availability of reduction, recycling and other waste reduction methods that are alternatives to landfilling for residential/commercial solid waste.

The District has calculated waste reduction rates from 2006 – 2023 that meet Goal #2 of the State Plan. The District is confident that the access program information under Goal #1 can be easily confirmed annually and will comply with the measurement of progress toward waste reduction goals under Goal #1. Therefore, this Plan Update is being written to comply with Goal #1 of the 1995 State Plan.

B. DEMONSTRATION OF COMPLIANCE WITH GOAL #1

According to the 1995 State Plan, SWMD's must demonstrate waste reduction activities or programs were implemented by the year 2000 for a minimum of seven out of eleven materials. Demonstration must show that each sector of waste generators has access to recycling or alternative management methods for at least four of the minimum seven materials. Demonstration must also show that the generator's participation in recycling and waste reduction programs is encouraged through district educational and financial incentives to promote participation, or that the district will investigate the feasibility of implementing financial incentives.

The District must designate four materials from a list of eleven materials that are highly amenable to recycling. The eleven materials are corrugated cardboard, office paper, newspaper, glass containers, steel containers, aluminum containers, plastic containers, wood pallets, lead-acid batteries, major appliances, and yard waste. Four of these materials must be identified and used to show compliance for both the residential and commercial/institutional sectors. Table 7-1 lists the materials that are designated and include for the residential sector newspaper and aluminum, steel and plastic containers and for the commercial/institutional sector cardboard, office paper, aluminum containers and wood packaging.

1. Residential

   a. Service Area: For the purpose of determining compliance with this goal the service area will be all of the Holmes County Solid Waste Management District.

   b. Access: Access is defined as the presence of waste reduction services or opportunities and other alternative management programs. Opportunity is defined as drop-off recycling, non-subscription curbside, subscription curbside, centralized MRF, or a combination of these. The State Plan requires districts to demonstrate access for: (1) a minimum of 90 percent of the population of the service area, and (2) the four materials designated for the recycling program (Table 8-1).

   The OEPA plan format allows the district to use a formula to determine the percentage of the population that has access to services depending upon the type of service provided. Below are the types of service which pertain to the District.

- *Non-subscription Curbside:* None available in 2005, Millersburg program began in July, 2006. See description in Section 5.
- *Full Service Drop Offs:* This site is open to the public >40-hours per week and handles a minimum of the 4 designated materials by this Plan Update.
- *A Rural area* is defined as any municipality or township less than 5,000 in population.
- *An Urban area* is defined as any municipality or township equal to or greater than 5,000 in population.
- Credit may be taken for 2,500 persons served in a rural area and 5,000 persons served in an urban area.

Table 7-2 shows the calculation of the residential sector access for the District. The program listings correspond to the programs that were in place in the reference year. In 2005, the District achieved 100% recycling access and in 2009, the first year of the planning period, the District also achieved 95% recycling access credit.

c. Participation: Districts must demonstrate meeting the participation standard by:

(1) Developing and implementing an adequate education and awareness program and (2) evaluating the feasibility of education programs for promotion of financial incentives to encourage increased recycling and/or waste reduction.

Education and Awareness: Please refer to Section 5-E which contains the demonstration that education and awareness strategies are in place for each program used to meet the access and participation standards.

Financial Incentives: In order to satisfy the financial incentives requirement, the District will explore the feasibility of developing a volume based trash collection program that includes curbside recycling at no cost. The current curbside program offered in the District is the Village of Millersburg. The District will work with the Village to add a volume based trash system during the next contract period (scheduled to be 2012). Depending on the acceptance of Millersburg and the capability of the contractor, the implementation of such a program may be possible in 2012.

The District will also evaluate the feasibility of incorporating its large network of recycling drop-off sites into a countywide volume based program where haulers providing service to residence outside of Millersburg can reduce their trash bills by recycling more at the free drop-off sites and thus generating less trash for disposal. The District will survey the haulers after this Plan Update is approved to see the willingness of them to offer volume based trash services. Depending on the survey results, the District would work with the haulers to promote the program.

2. Commercial/Institutional

a. Service Area: The service area is for all of the Holmes County Solid Waste Management District.

b. Access: From 1986 to 2001 a public Material Recovery Facility (MRF) was available to all citizens, businesses and industries of Holmes County. Beginning in 1992, the District developed drop-off locations throughout the county. The MRF, the processing portion of which was closed in 2001, and each of the drop-offs continues to accept corrugated cardboard, office paper, glass containers, aluminum containers, and wood packaging & pallets for the Commercial/institutional sector. Additional information about these facilities is located in Tables 3-5, 3-8, and 3-9. Please refer to Table 7-2A for details.

c. Participation: The District has demonstrated that education/awareness strategies, developed and targeted at this sector, are in place for each program used to meet access and participation standards. This information is expanded in Section 5.0.

3. Targets for Reduction and Recycling

a. Residential and Commercial: Table 7-3 presents the annual waste reduction rates for residential and commercial waste. The District's residential/commercial sector had a waste reduction rate of 18% in the 2005 reference year. The waste reduction rate increases throughout the planning period to 25%.

b. Industrial: Table 7-4 presents the annual waste reduction rate for industrial waste. During the reference year the District reduced industrial waste by 97%. This reduction rate is projected to increase throughout the planning period to nearly 100%.

c. District Total: Table 7-5 presents annual reduction rates for total residential/commercial and industrial wastes. The District's annual waste reduction rate is 78% in the reference year and is projected to increase to 81% by the end of the planning period.

Table VII-1
Materials Designated to Demonstrate Compliance with Goal #1

Eleven Materials Highly Amenable to Recycling, etc.	Four Materials Designated for the Residential Sector	Four Materials Designated for the Commercial/Industrial Sector	Number of Times Materials are Designated
Corrugated cardboard		X	1
Office paper		X	1
Newspaper	X		1
Glass containers			0
Steel containers	X		1
Aluminum containers	X	X	2
Plastic containers	X		1
Wood packaging & pallets		X	1
Lead-acid batteries			0
Major appliances			0
Yard waste			0
Totals	**4**	**4**	**8**

Table VII-2
Calculation of Access for Residential Sector

Program	Reference Year (2005)		Year 2009	
	2005 Population	Population with Access	2009 Population	Population with Access
Non-Subscription Curbside				
Millersburg	0	0	3,632	3,632
Subtotal Non-Subscription Curbide		**0**		**3,632**
Subscription Curbside				
none	0	0	0	0
Subtotal Subscription Curbside		**0**		**0**
Part Time Drop-Off				
none	0	0	0	0
Subtotal Part Time Drop-Off		**0**		**0**
Full Time Drop-Off				
Berlin Village (Berlin Township)	4,827	2,500	5,112	5,000
Glenmont Village (Richland Township)	1,228	2,500	1,300	0
Hardy Twp./Millersburg	5,947	5,000	6,298	5,000
Hardy Twp./Millersburg	5,947	5,000	6,298	5,000
Winesburg Village (Paint Township)	3,696	2,500	3,914	2,500
Township)	3,670	2,500	3,887	2,500
Killbuck Village (Killbuck Township)	2,055	2,500	2,176	2,500
Clark Village (Clark Township)	3,763	2,500	3,985	2,500
Mt. Hope Village (Salt Creek Township)	3,937	2,500	4,169	2,500
Holmesville Village (Prairie Township)	2,933	2,500	3,106	2,500
Lake Buckhorn Community	328	2,500	347	0
Nashville Village	148	2,500	157	2,500
Charm Village (Clark Township)	3,763	2,500	3,985	0
Farmerstown Village (Clark Township)	3,763	2,500	3,985	2,500
Lakeville Village (Washington Township)	1,489	2,500	1,577	2,500
Total Full Time Drop-Off		**42,500**		**37,500**
Total Population With Access		**42,500**		**41,132**
Service Area Population		**40,790**		**43,204**
90 percent		**36,711**		**38,884**
Additional Population Needing Access		**-5,789**		**-2,248**
Access Percentage		**100%**		**95%**

Note: The full-time drop-off sites located at the Holmes County Jail, Holmes County MRDD Training Center, Holmes County Home, Pomerene Hospital and the six school sites (Table 6-5) are not included in the totals above because they service primarily those institutions where they are located. Employees working at those sites probably use them, however, the District cannot determine institutional from employee recyclables.

Table VII-3
Annual Rate of Waste Reduction: Residential/Commercial Waste

Year	Recycling	Composting	Landfill	Tons Waste Reduction	Population	Waste Reduction Rate (%)	Per Capita Waste Reduction Rate (lb/day)
2005	7,389	0	33,601	7,389	40,790	18%	0.99
2006	8,812	0	26,867	8,812	41,332	25%	1.17
2007	10,007	0	29,121	10,007	41,631	26%	1.32
2008	10,133	0	27,410	10,133	42,155	27%	1.32
2009	10,265	0	27,936	10,265	42,680	27%	1.32
2010	10,385	0	28,478	10,385	43,204	27%	1.32
2011	10,451	0	28,856	10,451	43,480	27%	1.32
2012	10,528	0	29,227	10,528	43,756	26%	1.32
2013	10,584	0	29,621	10,584	44,032	26%	1.32
2014	10,650	0	30,008	10,650	44,307	26%	1.32
2015	10,730	0	30,386	10,730	44,583	26%	1.32
2016	10,775	0	30,772	10,775	44,825	26%	1.32
2017	10,832	0	31,145	10,832	45,065	26%	1.32
2018	10,904	0	31,509	10,904	45,306	26%	1.32
2019	10,948	0	31,904	10,948	45,547	26%	1.32
2020	11,007	0	32,289	11,007	45,790	25%	1.32
2021	11,079	0	32,665	11,079	46,034	25%	1.32
2022	11,125	0	33,074	11,125	46,281	25%	1.32
2023	11,184	0	33,471	11,184	46,526	25%	1.32

Source
Recycling and Composting data are from Table VI-2.
Landfill data is from Table VI-2.
No other waste management methods are used

Sample Calculation (Year 2005):

Recycling + Composting = Tons Waste Reduction
7,389 + 0 tons + = 7,389 tons

Tons Waste Reduction / (Tons Waste Reduction + Landfill) *100 = Waste Reduction Rate
7,389 tons / (7,389 tons + 33,601 tons) * 100 = 18 %

Tons Waste Reduction * 2000 lbs/ton / (District Population * 365 days/year) = Per Capita Waste Reduction Rate
(7,389 tons * 2000) / (40,790 * 365) = 0.99 lb/day

Table VII-4
Annual Rate of Waste Reduction: Industrial Waste

Year	Total Waste Reduction	Landfill	Population	Waste Reduction Rate (%)	Per Capita Waste Reduction Rate (lb/day)
2005	123,424	3,202	40,790	97%	16.58
2006	123,423	3,760	41,332	97%	16.36
2007	126,965	778	41,631	99%	16.71
2008	127,524	781	42,155	99%	16.58
2009	128,085	784	42,680	99%	16.44
2010	128,648	788	43,204	99%	16.32
2011	129,215	791	43,480	99%	16.28
2012	129,783	795	43,756	99%	16.25
2013	130,354	798	44,032	99%	16.22
2014	130,928	802	44,307	99%	16.19
2015	131,504	805	44,583	99%	16.16
2016	132,082	809	44,825	99%	16.15
2017	132,664	813	45,065	99%	16.13
2018	133,247	816	45,306	99%	16.12
2019	133,834	820	45,547	99%	16.10
2020	134,422	823	45,790	99%	16.09
2021	135,014	827	46,034	99%	16.07
2022	135,608	831	46,281	99%	16.06
2023	136,205	834	46,526	99%	16.04

Source
Waste reduction data is from Table VI-3.
Landfill data is from Table VI-3.
No other waste management methods are used

Sample Calculation (Year 2005):

Tons Waste Reduction / (Tons Waste Reduction + Landfill) *100 = Waste Reduction Rate
123,424 tons / (123,424 tons + 3,202 tons) * 100 = 97%

Tons Waste Reduction * 2000 lbs/ton / (District Population * 365 days/year) = Per Capita Waste Reduction Rate
(123,424 tons * 2000) / (40,790 * 365) = 16.58 lb/day

Table VII-5
Annual Rate of Waste Reduction: Total District Solid Waste

Year	Recycling and Source Reduction	Composting	Landfill	Tons Waste Reduction	Population	Waste Reduction Rate (%)	Per Capita Waste Reduction Rate (lb/day)
2005	130,813	0	36,803	130,813	40,790	78%	17.57
2006	132,235	0	30,627	132,235	41,332	81%	17.53
2007	136,972	0	29,899	136,972	41,631	82%	18.03
2008	137,657	0	28,191	137,657	42,155	83%	17.89
2009	138,350	0	28,720	138,350	42,680	83%	17.76
2010	139,033	0	29,266	139,033	43,204	83%	17.63
2011	139,666	0	29,647	139,666	43,480	82%	17.60
2012	140,311	0	30,022	140,311	43,756	82%	17.57
2013	140,938	0	30,419	140,938	44,032	82%	17.54
2014	141,578	0	30,810	141,578	44,307	82%	17.51
2015	142,234	0	31,191	142,234	44,583	82%	17.48
2016	142,857	0	31,581	142,857	44,825	82%	17.46
2017	143,496	0	31,958	143,496	45,065	82%	17.45
2018	144,152	0	32,325	144,152	45,306	82%	17.43
2019	144,782	0	32,723	144,782	45,547	82%	17.42
2020	145,429	0	33,113	145,429	45,790	81%	17.40
2021	146,093	0	33,492	146,093	46,034	81%	17.39
2022	146,733	0	33,905	146,733	46,281	81%	17.37
2023	147,388	0	34,306	147,388	46,526	81%	17.36

Source
Recycling and Composting data are from Table VI-2 and VI-3.
Landfill data is from Table VI-3 and VI-4.
No other waste management methods are used

Sample Calculation (Year 2005):

Recycling/Source Reduction + Composting = Tons Waste Reduction
130,813 tons + 0 tons = 130,813 tons

Tons Waste Reduction / (Tons Waste Reduction + Landfill) *100 = Waste Reduction Rate
130,813 tons / (130,813 tons + 36,803 tons) * 100 = 78 %

Tons Waste Reduction * 2000 lbs/ton / (District Population * 365 days/year) = Per Capita Waste Reduction Rate
(130,813 tons * 2000) / (40,790 * 365) = 17.57 lb/day